

AMENDMENTS TO THE SPECIFICATION

Please substitute AMENDED pages 1-3 for page 1-3 in the English translation of PCT/EP2003/010144.

On AMENDED page 1, after the title, please insert the following new section headings:

-- **BACKGROUND OF THE INVENTION** --

--(1) **Field of the Invention**--

On AMENDED page 1, after the first complete paragraph, please insert the following new section heading:

--(2) **Description of the Prior Art**--

On AMENDED page 2, before the paragraph beginning "This invention teaches that the wall....", please insert the following new section heading:

-- **SUMMARY OF THE INVENTION** --

On page 8, before the paragraph beginning with "Figure 1....," please insert the following new section heading:

-- **BRIEF DESCRIPTION OF THE DRAWINGS** --

On page 9, before the paragraph beginning with "A device...," please insert the following new section heading:

-- **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS** --

On page 9, please replace the paragraph beginning with "The luminescent" with the following rewritten paragraph:

-- The luminescent substance 2 is located in the interior cavity 6 of a measurement chamber 7, the walls of which are essentially impermeable for the luminescent radiation 5. The measurement chamber 7 has a wall area that faces the radiation source 3 and is permeable to the excitation radiation ~~3-[sie-4?]~~ 4 and is formed by a disc-shaped or plate-shaped silicon semiconductor substrate 8. The semiconductor substrate 8 can be economically manufactured from a silicon wafer during the fabrication of the measurement chamber 7. --